

Title (en)
PRODUCT DISTRIBUTION DEVICE WITH RAPID PISTON ROD RESETTING

Title (de)
PRODUKTAUSSCHÜTTVORRICHTUNG MIT KOLBENSTANGEN-EILRÜCKSETZUNG

Title (fr)
DISPOSITIF DE DEVERSEMENT DE PRODUIT COMPORTANT UN MECANISME DE RETOUR RAPIDE DE LA TIGE DE PISTON

Publication
EP 1519766 A1 20050406 (DE)

Application
EP 03761386 A 20030625

Priority
• CH 0300419 W 20030625
• DE 10229138 A 20020628
• DE 10229122 A 20020628

Abstract (en)
[origin: US7842016B2] A substance delivery device including a casing formed by a first casing portion for a substance reservoir including a piston, a piston rod movable in an advancing direction to move the piston toward an outlet of the reservoir to deliver the substance, a dosing element which performs a dosing movement relative to the casing and, together with the piston rod, performs a delivery movement in the advancing direction, a dosing member connected to the dosing element wherein the dosing member is movable generally transversely to the piston rod to enable the piston rod to be moved counter to the advancing direction, a resetting element movably connected to the first casing portion to perform dosing member and piston rod disengaging and engaging movements, and a cam gear coupling the resetting element to the dosing member, wherein the cam gear forms a guiding rail on which the dosing member is guided.

IPC 1-7
A61M 5/315

IPC 8 full level
A61M 5/24 (2006.01); **A61M 1/36** (2006.01); **A61M 5/315** (2006.01); **A61M 31/00** (2006.01); **A61M 5/31** (2006.01)

CPC (source: EP US)
A61M 5/31553 (2013.01 - EP US); **A61M 5/3158** (2013.01 - EP US); **A61M 5/31585** (2013.01 - EP US); **A61M 5/24** (2013.01 - EP US); **A61M 5/31535** (2013.01 - EP US); **A61M 5/31543** (2013.01 - EP US); **A61M 5/31558** (2013.01 - EP US); **A61M 5/31593** (2013.01 - EP US); **A61M 2005/3125** (2013.01 - EP US); **A61M 2005/3126** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2005137571 A1 20050623; US 7500966 B2 20090310; AT E409056 T1 20081015; AU 2003232576 A1 20040119; AU 2003232576 B2 20060706; AU 2003232577 A1 20040119; CN 100457208 C 20090204; CN 1678362 A 20051005; DE 10229122 A1 20040205; DE 10229122 B4 20060907; DE 10229138 A1 20040129; DE 10229138 B4 20080131; DE 50310544 D1 20081106; DK 1519766 T3 20090202; EP 1519766 A1 20050406; EP 1519766 B1 20080924; JP 2005531348 A 20051020; JP 2005531349 A 20051020; JP 4302627 B2 20090729; JP 4485942 B2 20100623; US 2005137534 A1 20050623; US 2009137967 A1 20090528; US 2009221973 A1 20090903; US 7445613 B2 20081104; US 7842016 B2 20101130; WO 2004002556 A1 20040108; WO 2004002557 A1 20040108

DOCDB simple family (application)
US 2329704 A 20041227; AT 03761386 T 20030625; AU 2003232576 A 20030625; AU 2003232577 A 20030625; CH 0300419 W 20030625; CH 0300420 W 20030625; CN 03819907 A 20030625; DE 10229122 A 20020628; DE 10229138 A 20020628; DE 50310544 T 20030625; DK 03761386 T 20030625; EP 03761386 A 20030625; JP 2004516406 A 20030625; JP 2004516407 A 20030625; US 2328504 A 20041227; US 25598808 A 20081022; US 39668509 A 20090303